

METHOD FOR GROWING CRYSTAL

METHOD FOR GROWING CRYSTAL

Patent Number: JP5186295

Publication date: 1993-07-27

Inventor(s): SAKUMA YOSHIKI

Applicant(s): FUJITSU LTD

Requested Patent: JP5186295

Application Number: JP19920004194 19920113

Priority Number(s):

IPC Classification: C30B25/02; C30B29/42

EC Classification:

EC Classification:

Equivalents:

Abstract

PURPOSE: To accurately form one atomic layer by depositing >=one atomic layer of a constituent element layer of a compound to be grown on the surface of a substrate, supplying a specific substance to the surface and removing the constituent element unbonded to the substrate.

CONSTITUTION: A case of growing crystal of GaAs is explained. An atomic layer 2 of As is grown on a GaAs base 1, a raw material 3 of Ga is fed to the base and >=one atomic layer of Ga atoms 4 is deposited on the As atomic layer 2. Then methyl group 5 to form a substance which is bonded to Ga and has weaker bond force than one between Ga and As is supplied to a growth face, brought into contact and reacted with the Ga atom 4a having deposited >=one atomic layer and evaporated as methylated gallium. In the operation, since the Ga atom 4b of one atomic layer directly bonded to the atomic layer 2 of As has strong bond force to As, this Ga atom will not release from the surface even if the methyl group comes into contact with this Ga atom of one atomic layer.